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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/337,584DATE: 07/08/1999
TIME: 15:23:51

Input Set: I337584.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

*see p. 5***ENTERED**

1 <110> APPLICANT: Krieg, Arthur M.
2 Kline, Joel N.
3 <120> TITLE OF INVENTION: Methods of Treating Allergic and
4 Asthmatic Disorders Using Immunostimulatory Oligonucleotides
5 <130> FILE REFERENCE: C1039/7020/HCL
6 <140> CURRENT APPLICATION NUMBER: US/09/337,584
7 <141> CURRENT FILING DATE: 1999-06-21
8 <150> EARLIER APPLICATION NUMBER: US 08/960,774
9 <151> EARLIER FILING DATE: 1997-10-30
10 <150> EARLIER APPLICATION NUMBER: US 08/738,652
11 <151> EARLIER FILING DATE: 1996-10-30
12 <150> EARLIER APPLICATION NUMBER: US 08/386,063
13 <151> EARLIER FILING DATE: 1995-02-07
14 <150> EARLIER APPLICATION NUMBER: US 08/276,358
15 <151> EARLIER FILING DATE: 1994-07-15
16 <160> NUMBER OF SEQ ID NOS: 123
17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
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20 <212> TYPE: DNA
21 <213> ORGANISM: Artificial Sequence
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23 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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28 <212> TYPE: DNA
29 <213> ORGANISM: Artificial Sequence
30 <220> FEATURE:
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37 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
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40 <400> SEQUENCE: 3
41 tccataacgt tcctgatgct 20
42 <210> SEQ ID NO 4
43 <211> LENGTH: 15
44 <212> TYPE: DNA

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53	<213> ORGANISM: Artificial Sequence	
54	<220> FEATURE:	
55	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
56	<400> SEQUENCE: 5	
57	gagaacgtcg accttcgat	19
58	<210> SEQ ID NO 6	
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63	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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65	gcatgacgtt gagct	15
66	<210> SEQ ID NO 7	
67	<211> LENGTH: 20	
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69	<213> ORGANISM: Artificial Sequence	
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71	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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74	<210> SEQ ID NO 8	
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77	<213> ORGANISM: Artificial Sequence	
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79	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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83	<211> LENGTH: 20	
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87	<223> OTHER INFORMATION: Synthetic Oligonucleotide	
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91	<211> LENGTH: 20	
92	<212> TYPE: DNA	
93	<213> ORGANISM: Artificial Sequence	
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134 <222> LOCATION: (13)...(13)
135 <223> OTHER INFORMATION: m5c
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155	<223> OTHER INFORMATION: m5c	
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175	<223> OTHER INFORMATION: m5c	
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193	<213> ORGANISM: Artificial Sequence	
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205     gagaacgctg gaccttccat                                20
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209 <213> ORGANISM: Artificial Sequence
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227 <223> OTHER INFORMATION: Synthetic Oligonucleotide
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229     gagcaagctg gaccttccat                                20
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232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
234 <220> FEATURE:
235 <223> OTHER INFORMATION: Synthetic Oligonucleotide
236 <220> FEATURE:
237 <221> NAME/KEY: modified_base
238 <222> LOCATION: (6)...(6)
239 <223> OTHER INFORMATION: m5c
240 <400> SEQUENCE: 24
241     gagaangctg gaccttccat                                20
242 <210> SEQ ID NO 25
243 <211> LENGTH: 20
244 <212> TYPE: DNA

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Line	? Error/Warning	Original Text
125	W "N" or "Xaa" used: Feature required	gctagangtt agcgt
137	W "N" or "Xaa" used: Feature required	gctagacggt agngt
165	W "N" or "Xaa" used: Feature required	atngactctn gagngttctc
177	W "N" or "Xaa" used: Feature required	atngactctc gagcgttctc
189	W "N" or "Xaa" used: Feature required	atcgactctc gagcgttntc
241	W "N" or "Xaa" used: Feature required	gagaangctg gaccttccat
253	W "N" or "Xaa" used: Feature required	gagaacgctg gacnttccat
297	W "N" or "Xaa" used: Feature required	tccatgtngg tcctgatgct
309	W "N" or "Xaa" used: Feature required	tccatgtcgg tnctgatgct
409	W "N" or "Xaa" used: Feature required	gctagacntt agtgt
421	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgatgct
1001	W "N" or "Xaa" used: Feature required	atcgactctc gagngttctc
1013	W "N" or "Xaa" used: Feature required	gctagangtt agtgt
1061	W "N" or "Xaa" used: Feature required	tccatgtngt tcctgtngtt